

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003007**Date Inspected:** 12-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Fu Yu Hong**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The QA inspector observed ZPMC performing layout, cutting, beveling, milling, fitting and welding activities in bay # 1 and 2 on Tower Assembly shop.

The QA inspector observed ZPMC welders Zheng Ming Hu, Jiang Zhou and Sun Tao were performing welding operations with the flux cored arc welding (FCAW) process using the WPS-B-T-2231-B-U3-F in the flat (1G) position at the junction of section SSD1-SA173 G/K-2B SSD1-SA16 A/G-59B, SSD1-SA173 G/K-22B longitudinal stiffeners splices. The QA inspector performed welding parameters verifications. The QA inspector found that the welding parameters appeared to be in compliance with the contract documents.

Skin C South lift # 1

The QA inspector observed ZPMC performing welding operations with the submerged arc welding (SAW) process using the WPS-BT2221-U3 c-S in the flat (1G) position at the junction of the weld joint # SSD1-SA-17 F/G-7 skin C. The QA inspector performed welding parameters verifications. The QA inspector found that the welding parameters appeared to be in compliance with the contract documents. Welding operator was Chen HongXia (040460) and the Certified Welding Inspector designated was Xu Len Feng.

Skin A South Lift # 1

The QA inspector observed ZPMC performing heat straightening operations at the plate # p203(s), P1271(s) correcting a 3 mm deformation according with HSR1(T)-2340. The heat straightening operations at the

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

longitudinal stiffener for the HSR1(T)- 2358 on the plates P39 (S), P327(S), P327 B(S).....P1028B(S). ZPMC's heat straightening operations appeared to be in compliance with the contract documents.

Ultrasonic testing

The QA inspector performed ultrasonic testing (UT) at the completed joint penetration at the skin plates splices weld joints # SSD1-SA 15-A/F-34A; SSD1-SA-159-E/J-23B, SSD1-SA159-E/J-24B, SSD1-SA159-F/J-23A and SSD1-SA159-F/J-24A. The QA inspector performed 10 % UT at random locations. The QA inspector found that welds areas tested appeared to be in compliance with the contract documents. See UT report TL_6027 generated on this date.

Note: No production welding was observed in Tower bay # 2 on this date.

Summary of Conversations:

The QA inspector did not have any relevant conversation on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Acuna,Alfredo	Quality Assurance Inspector
----------------------	---------------	-----------------------------

Reviewed By:	Cochran,Jim	QA Reviewer
---------------------	-------------	-------------